AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A silicon dioxide powder, produced by flame hydrolysis, and displaying a hydroxyl group density of ~~2.5~~ 3 to 4.7 OH/nm^2, wherein the hydroxyl group density is determined by reaction of the silicon dioxide powder with lithium aluminum hydride according to the method of J. Mathias and G. Wannemacher in Journal of Colloid and Interface Science 125 (1988) 61.

Claim 2 (Previously Presented): The silicon dioxide powder according to claim 1, wherein the silicon dioxide powder is a doped silicon dioxide powder.

Claim 3 (Previously Presented): The silicon dioxide powder according to claim 1, wherein the silicon dioxide powder is a silicon-metal mixed oxide powder, containing a content of silicon dioxide of at least 60%.

Claim 4 (Previously Presented): The silicon dioxide powder according to claim 1, wherein the hydroxyl group density in the silicon dioxide powder is between 3 and 4 OH/nm^2.

Claim 5 (Previously Presented): The silicon dioxide powder according to claim 1, wherein the BET surface area of the silicon dioxide powder is between 5 and 600 m^2/g.

Claim 6 (Withdrawn-Currently Amended): A process for producing the silicon dioxide powder according to claim 1, comprising [[,]]

treating [[,]] a silicon dioxide powder, produced by a flame hydrolysis process and having a hydroxyl group density of less than 2.5 OH/nm^2, at temperatures of 40 to 700°C, under acid conditions, and for reaction times of 5 minutes to 20 hours, to form a reaction mixture, and

subsequently separating the treated powder from the reaction mixture.

Claim 7 (Withdrawn): The process according to claim 6, wherein inorganic or organic acids are used for the treatment.

Claim 8 (Withdrawn): An aqueous dispersion, comprising the silicon dioxide powder according to claim 1, and water.

Claim 9 (Withdrawn): The aqueous dispersion according to claim 8, wherein said dispersion, over a period of 6 months, does not thicken further and forms no sediment.

Claim 10 (Withdrawn): The aqueous dispersion according to claim 8, wherein said dispersion has a content of silicon dioxide powder between 10 and 70 wt.%.

Claim 11 (Withdrawn): The aqueous dispersion according to claim 8, wherein said dispersion has a pH between 3 and 12.

Claim 12 (Withdrawn): The aqueous dispersion dispersion according to claim 8, wherein the average aggregate diameter in the dispersion is less than 200 nm.

Claim 13 (Withdrawn): The aqueous dispersion according to claim 8, wherein said dispersion contains oxidising agents, corrosion inhibitors and/or surface-active substances.

Claim 14 (Withdrawn-Currently Amended): A process for producing the dispersion according to claim 8, comprising [[,]] incorporating a silicon dioxide powder, having a hydroxyl group density of ~~2.5~~ 3 to 4.7 OH/nm^2, obtained from a silicon dioxide powder produced by flame hydrolysis, into an aqueous solution by means of a dispersing device.

Claim 15 (Withdrawn-Currently Amended): A method of producing a transparent coating, comprising [[,]] applying the dispersion of claim 8 to a substrate.

Claim 16 (Withdrawn-Currently Amended): A method of producing a chemical mechanical polishing, comprising [[,]] contacting the dispersion of claim 8 with one or more polishing additives.

Claim 17 (Withdrawn-Currently Amended): A method of producing glass, comprising [[,]] contacting the dispersion of claim 8 with one or more additives for glass manufacturing.

Claim 18 (Withdrawn-Currently Amended): A method of producing a sol-gel glass article, comprising [[,]] contacting the dispersion of claim 8 with one or more additives for sol-gel glass article manufacturing.